### **Amendments to the Claims:**

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This listing of claims will replace all prior versions and listings of claims in the application:

## **Listing of Claims:**

### 1-3. (Cancelled)

- 4. (Currently Amended) An isolated starter culture useful in manufacturing and preservation of food and feed products comprising at least one modified lactic acid bacterial cell wherein said The composition according to claim 13, wherein the at least one modified lactic acid bacterial cell comprises at least 0.1 ppm on a dry matter basis of a cytochrome.
- 5. (Currently Amended) The eomposition <u>culture</u> according to claim <u>4</u> [[13]], wherein the at least one modified lactic acid bacterial cell, when <u>cultured</u> aerobically, comprises at least 0.1 ppm on a dry matter basis of cytochrome d.
- 6. (Currently Amended) The composition <u>culture</u> according to claim <u>4 [[13]]</u>, wherein the at least one modified lactic acid bacterial cell is of a bacterial species selected from the group consisting of *Lactococcus* spp., *Lactobacillus* spp., *Leuconostoc* spp., *Pediococcus* spp., *Streptococcus* spp., *Propionibacterium* spp., *Bifidobacterium* spp., and *Oenococcus* spp.
- 7. (Currently Amended) The eomposition <u>culture</u> according to claim <u>4 [[13]]</u>, wherein the at least one modified lactic acid bacterial cell is *Lactococcus lactis*.
- 8. (Currently Amended) The composition culture according to claim 4 [[13]], wherein the at least one modified lactic acid bacterial cell when it is in the form of a cell suspension, is inoculated in a concentration of 10<sup>7</sup> cells/ml into low pasteurised skimmed milk having 8 ppm of dissolved oxygen and when the milk is allowed to stand for about two hours at a temperature of about 30°C, the cell consumes at least 25% of the dissolved oxygen.
- 9. (Currently Amended) The eomposition <u>culture</u> according to claim 8 where the at least one modified lactic acid bacterial cell consumes at least 50% of the dissolved oxygen.

10. (Currently Amended) The eomposition culture according to claim 4 [[13]], wherein the at least one modified lactic acid bacterial cell relative to a cell from which it is derived, has a decreased NADH oxidase (NOX) activity, a decreased lactate dehydrogenase (LDH) activity, or a decreased NOX activity and decreased LDH activity.

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- 11. (Currently Amended) The eomposition <u>culture</u> according to claim 10, wherein the at least one modified lactic acid bacterial cell has a NOX activity which is decreased by at least 10% under aerobic conditions.
- 12. (Currently Amended) The eomposition <u>culture</u> according to claim 10, wherein the at least one modified lactic acid bacterial cell has a LDH activity which is decreased by at least 10% under aerobic <u>conditions</u>.
- 13. (Currently Amended) An isolated starter culture composition useful in manufacturing and preservation of food and feed products comprising at least one modified lactic acid bacterial cell wherein said at least one modified lactic acid bacterial cell comprises at least 0.1 ppm on a dry matter basis of a porphyrin compound which includes iron, wherein said at least one modified lactic acid bacterial cell is obtainable by culturing in a medium containing a protoporphyrin compound or its complexes with an iron atom.
- 14. (Currently Amended) The eomposition <u>culture</u> according to claim 13, wherein the eomposition <u>culture</u> is in the form of a frozen, liquid or freeze-dried eomposition <u>culture</u>.
- 15. (Currently Amended) The eomposition <u>culture</u> according to claim 13 comprising an amount of viable modified lactic acid bacterial cells which is in the range of 10<sup>4</sup> to 10<sup>12</sup> CFU per gram.
- 16. (Currently Amended) The composition culture according to claim 13 which comprises modified lactic acid bacterial cells of two or more different lactic acid bacterial strains, wherein said bacterial cells are cultured aerobically and contain at least 0.1 ppm cytochrome d.

17. (Currently Amended) The eomposition <u>culture</u> according to claim 13, further comprising at least one component which enhances the viability of the modified lactic acid bacterial cell during storage.

# 18-28. (Cancelled)

- 29. (Withdrawn) A method of reducing the oxygen content in a food or feed product or in a food or feed product starting material comprising adding to the product or to the starting material an effective amount of the starter culture composition according to claim 13.
- 30. (Withdrawn) A method of improving the shelf life and/or the quality of an edible product comprising adding to the product an effective amount of the starter culture composition according to claim 13.
- 31. (Withdrawn) A method of preparing a fermented food or feed product, comprising adding an effective amount of the composition of claim 13 to a food or feed product starting material, wherein the composition is capable of fermenting said starting material to obtain the fermented food or feed product.
- 32. (Withdrawn) Use of the composition of claim 13 for the production of a metabolite produced by the composition or by a non-modified cell co-cultivated therewith.
  - 33. (Withdrawn) Use of the composition of claim 13 for the production of a bacteriocin.
- 34. (Currently Amended) The eomposition <u>culture</u> of claim 13, wherein the bacterial species of the at least one lactic acid bacterial cell which is modified is *Lactococcus lactis* strain CHCC373 deposited under the accession number DSM12015.
- 35. (Currently Amended) The eomposition <u>culture</u> according to claim 13, which includes a bacterial nutrient, a cryoprotectant or a bacterial nutrient and a cryoprotectant.
- 36. (Currently Amended) The eomposition <u>culture</u> according to claim 13, wherein the at least one modified lactic acid bacterial cell comprises at least 0.2 ppm on a dry matter basis of the porphyrin compound which includes iron.

- 37. (Currently Amended) The eomposition <u>culture</u> according to claim 13, wherein the at least one modified lactic acid bacterial cell comprises at least 1 ppm on a dry matter basis of the porphyrin compound which includes iron.
- 38. (Currently Amended) The eomposition <u>culture</u> according to claim 13, wherein the at least one modified lactic acid bacterial cell comprises at least 5 ppm on a dry matter basis of the porphyrin compound which includes iron.
- 39. (Currently Amended) The composition <u>culture</u> according to claim 13, wherein the at least one modified lactic acid bacterial cell comprises at least 20 ppm on a dry matter basis of the porphyrin compound which includes iron.
- 40. (Currently Amended) The composition <u>culture</u> according to claim 13, <u>which is useful</u> in the preservation of food and feed products wherein the at least one modified lactic acid bacterial cell comprises at least 60 ppm on a dry matter basis of the porphyrin compound which includes iron.
- 41. (Currently Amended) The composition <u>culture</u> according to claim 13, <u>which is useful</u> in the dairy industry wherein the at least one modified lactic acid bacterial cell comprises at least 80 ppm on a dry matter basis of the porphyrin compound which includes iron.
- 42. (Currently Amended) The eomposition <u>culture</u> according to claim 13, <u>which is</u> <u>capable of reducing the oxygen content in an edible product</u> wherein the at least one modified <u>lactic acid bacterial cell comprises at least 100 ppm on a dry matter basis of the porphyrin compound which includes iron</u>.
- 43. (Currently Amended) The eomposition <u>culture</u> according to claim 13, wherein the at least one modified lactic acid bacterial cell comprises at least 0.5 ppm on a dry matter basis of a cytochrome.
- 44. (Currently Amended) The eomposition <u>culture</u> according to claim 13, wherein the at least one modified lactic acid bacterial cell comprises at least 10 ppm on a dry matter basis of a cytochrome.

- 45. (Currently Amended) The eomposition <u>culture</u> according to claim 13, wherein the at least one modified lactic acid bacterial cell comprises at least 40 ppm on a dry matter basis of a cytochrome.
- 46. (Currently Amended) The <u>composition culture</u> according to claim 13, wherein the at least one modified lactic acid bacterial cell comprises at least 70 ppm on a dry matter basis of a cytochrome.
- 47. (Currently Amended) The eomposition <u>culture</u> according to claim 13, wherein the at least one modified lactic acid bacterial cell comprises at least 90 ppm on a dry matter basis of a cytochrome.
- 48. (Currently Amended) The eomposition <u>culture</u> according to claim 13, wherein the at least one modified lactic acid bacterial cell reduces the amount of oxygen present in a medium by at least 1% per hour, and wherein the at least one modified lactic acid bacterial cell is obtainable by <u>culturing</u> in a medium <u>containing 10 mg/L haemin</u>.
- 49. (Currently Amended) The eomposition <u>culture</u> according to claim 13, wherein the at least one modified lactic acid bacterial cell reduces the amount of oxygen present in a medium by at least 20% per hour, <u>and wherein the at least one modified lactic acid bacterial cell is</u> obtainable by <u>culturing in a medium containing 10 mg/L haemin</u>.
- 50. (Currently Amended) The eomposition culture according to claim 13, wherein the at least one modified lactic acid bacterial cell reduces the amount of oxygen present in a medium by at least 40% per hour, and wherein the at least one modified lactic acid bacterial cell is obtainable by culturing in a medium containing 10 mg/L haemin.
- 51. (Currently Amended) The eomposition <u>culture</u> according to claim 13, wherein the at least one modified lactic acid bacterial cell reduces the amount of oxygen present in a medium by at least 70% per hour, and wherein the at least one modified lactic acid bacterial cell is <u>obtainable by culturing in a medium containing 10 mg/L haemin</u>.

- 52. (Currently Amended) The composition culture according to claim 13, wherein the at least one modified lactic acid bacterial cell reduces the amount of oxygen present in a medium by at least 90% per hour, and wherein the at least one modified lactic acid bacterial cell is obtainable by culturing in a medium containing 10 mg/L haemin.
- 53. (Withdrawn) A method for the production of a metabolite comprising adding the composition of claim 13 to a starting material and maintaining the resulting mixture under conditions suitable to produce the metabolite.
- 54. (Withdrawn) A method for the production of a metabolite comprising adding the composition of claim 13 and a non-modified cell co-cultivated with the composition and maintaining the resulting mixture under conditions suitable to produce the metabolite.
- 55. (Withdrawn) A method for the production of a bacteriocin comprising adding the composition of claim 13 to a starting material and maintaining the resulting mixture under conditions suitable to produce bacteriocin.
- 56. (Currently Amended) The eomposition <u>culture</u> according to claim 13, wherein the at least one modified lactic acid bacterial cell exhibits a modified aerobic breakdown of carbohydrates as compared to a lactic acid bacterial cell which has not been modified and which does not comprise at least 0.1 ppm on a dry matter basis of a porphyrin compound which includes iron.

### 57. (Cancelled)

- 58. (New) The culture according to claim 13, wherein the protoporphyrin compound or its complexes with an iron atom is heamin or haeme.
- 59. (New) The culture according to claim 13, wherein the protoporphyrin compound or its complexes with an iron atom is heamin.
- 60. (New) The culture according to claim 13, wherein the porphyrin compound which includes iron is heamin or haeme.

61. (New) The culture according to claim 13, wherein the porphyrin compound which includes iron is heamin.